

REMARKS

At the time the current Official Action was mailed, the Examiner rejected claims 1-38. Further, the Examiner objected to portions of the specification and drawings. In the present Amendment and Response, the specification and drawings have been amended. The amendments to the drawings are included in Appendix A. As such, reconsideration of the application in view of the remarks and amendments set forth below is respectfully requested.

Objections to the Specification

In the Official Action, the Examiner indicated that the specification should be updated to show the status of incorporated patent applications and revised to clearly recite structures associated with certain reference numerals. Accordingly, Applicants have amended the specification to update the status of the incorporated patent applications referenced in the present application in paragraph 0005 on page 2 and paragraph 0011 on page 5. Further, Applicants have amended the specification in paragraphs 0004, 0005, 0013, and 0018 and Figure 1 to clarify the reference numerals, as suggested by the Examiner. The amendments to the specification and the drawings do not add any new matter. Accordingly, Applicants respectfully request entry of these amendments.

Objections to the Drawings

The Examiner objected to drawings because the Examiner asserted that Figure 1 should be designated as "Prior Art." Also, the Examiner objected to the drawings as not showing the transaction order queue identifier of claim 8 and multiple channels of claim 14. Specifically, the Examiner stated:

3. Figure 1 should be designated by a legend such as –Prior Art—because only that which is old is illustrated. See MPEP § 608.02 (g). Corrected drawings in compliance with 37 CFR 1.121 (d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.121 (d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83 (a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed transaction queue identifier in the claim 8 and the multiple channels in the claim 14 must be shown or the feature(s) canceled from the claims(s). No new matter should be entered.

Official Action mailed August 17, 2004, p. 2.

As discussed below in greater detail, while Applicants have amended the drawings and specification to clarify the drawings with regarding claims 8 and 14, Applicants respectfully traverse the Examiner’s objection to the drawings regarding the labeling of Fig. 1 as “Prior Art.”

With regard to the Examiner’s assertion that the drawings do not shown the claimed subject matter, Applicants have amended the specification and the figures to conform to the original claims, as suggested by the Examiner. Specifically, with regard to the claimed channels, Applicants have added channels 225A-225N, 226A-226N, 227A-227N, 228A-228N between the parent-bridge 232 and the bus-bridges 262, 264, 266, 268 in Figures 2, 3A and 3B and the associated paragraphs in the specification. Also, Applicants have added channels 219A-219N between the bridge-bridge 200 and the parent-bridge 232 in Figure 3A and the associated paragraphs in the specification. With regard to the objection to the claimed transaction order queue identifier, Applicants have added transaction order queue identifiers 401-416 to TOQs

201-216 of bridge-bridge 200 and transaction order queue identifiers 441-456 to TOQs 241-256 of the parent-bridge 232 in Figures 2 and 3A and the associated paragraphs in the specification. As the revisions merely clarify the originally claimed subject matter, the revisions to these paragraphs and the drawings do not add any new matter. Accordingly, Applicants respectfully request entry of these amendments and the withdrawal of the Examiner's objections.

With regard to the Examiner's assertion that Figure 1 should be labeled as "prior art," Applicants respectfully traverse the objection. As discussed in greater detail below in the remarks to the rejection of independent claims 12, 21 and 26, Applicants respectfully assert that no prior art has been *admitted* in the present application. In short, Applicants note that the present application does not *admit* any prior art. Pursuant to M.P.E.P. § 2129, the statements of Applicants can only be used as admission if Applicants specifically admit that something is prior art. That is, Applicants *mentioning* something in the paragraphs of the "Description of Related Art" section is *not* an inherent admission of something being prior art. As a result, the passages relied upon by the Examiner and alleged to be prior art are, in fact, not admissions of prior art by Applicants.

Rejections under 35 U.S.C. § 112

The Examiner rejected claim 8 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Further, the Examiner rejected claims 12-20 under 35 U.S.C. § 112, first paragraph, based on a disclosure that is not enabling. Specifically, the Examiner stated:

6. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose the transaction queue identifier of the claim 8.

7. Claim 12-20 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A set of buffer for each child-link to hold incoming transaction and at least two TOQs for each child link to provide separate transaction ordering for the child link (page 3, Summary of the Invention, 1st paragraph) are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F. 2d 1229, 188 USPQ 356 (CCPA 1976). The multiple TOQs are essential to track each child's link's multiple transaction sources.

Official Action mailed August 17, 2004, pp. 3-4.

With regard to claim 8, Applicants have amended paragraph 0016 on pages 6 and 7 to incorporate the subject matter of claim 8. As this amendment merely clarifies subject matter presented in the original claims, the amendment does not add any new matter. Thus, Applicants respectfully request entry of the amendment.

With regard to the rejection of claims 12-20, Applicants respectfully traverse the Examiner's rejection of claims 12-20. To begin, it should be noted that a feature, which is taught as critical in a specification and is not recited in the claims, should result in a rejection of such claim under the enablement provision section of 35 U.S.C. 112. See *In re Mayhew*, 527 F.2d 1229, 1233, 188 U.S.P.Q. 356, 358 (C.C.P.A. 1976). However, in determining whether an unclaimed feature is critical, the entire disclosure must be considered. As such, features which

are merely preferred are not to be considered critical. *In re Goffe*, 542 F.2d 564, 567, 191 U.S.P.Q. 429, 431 (C.C.P.A. 1976). Further, Applicants note that the Manual of Patent Examiner Procedure (M.P.E.P.) § 706.03(c) lists information that the Examiner is to provide in conjunction with the aforementioned rejections, which includes the step or element omitted from the claims and a rationale for considering the omitted steps or elements critical or essential. *See id.*

In the rejection, the Examiner has merely asserted that multiple TOQs are essential, which is an unsupported statement that does not provide a rationale for considering the omitted steps or elements critical or essential. The Examiner's failure to provide this rationale critically impairs Applicants ability to meaningfully respond to the present rejection. Applicants assert there is no basis in the application to support the Examiner's position. Indeed, Applicants respectfully refer the Examiner to the passages from paragraph 0014 on pages 5 to paragraph 0018 on page 8 and Figure 2 of the present application, which fully support the present language of the claims in question. Furthermore, the specification never mentions this feature is critical. Therefore, no rationale supports the Examiner's assertion that the multiple TOQs are critical or essential elements of the independent claim 12.

However, if the Examiner wishes to maintain the present rejections of claims 12-20, Applicants respectfully request that the Examiner provide a rationale, correlated to the specification, for considering the omitted step or element critical or essential, as required by M.P.E.P. § 706.03(d). In view of the noted deficiencies of the rejection of claims 12-20 under 35 U.S.C. § 112, first paragraph, Applicants respectfully request that the Examiner withdraw the rejection.

Rejections under 35 U.S.C. § 102

The Examiner rejected claims 12-13 and 15-30 under U.S.C. § 102 (a) as being anticipated by admitted prior art. Specifically, the Examiner stated:

9. Claims 12-13 and 15-30 are rejected under 35 U.S.C. 102 (a) as being anticipated by the admitted prior art.

Referring to claim 12: The prior art discloses a plurality of grandchild-links (figure 1, structures 162 and 164) for receiving a plurality of transactions; a child-link (figure 1, structure 152) for sending the plurality of transactions received by the plurality of grandchild-links; a transaction identifier communication link (figure 1, structure 152) for sending a plurality of transaction identifiers associated with the plurality of transactions sent on the child-link. Each data packet's source connection identifier and designation connection identifier are the claimed transaction identifier for the transaction link. Hence, the claimed is anticipated by the prior art.

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Referring to claim 21: The prior art discloses receiving a transaction on the child-link (figure 1, structure 152). Each data packet's source connection identifier and designation connection identifier are the claimed transaction identifier for the transaction link; thus, the prior art discloses receiving a transaction identifier for the transaction link (figure 1, structure 152, Application, page 2, line 3); matching the transaction identifier to a transaction order queue of the plurality of transaction order queues (Application, page 3, line 1, one-to-one relationship, figure 1, structure 142 and 144) for the child-link; and routing the transaction to the transaction order queue. Hence, claim is anticipated by the prior art.

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Referring to claim 26: The prior art discloses receiving a transaction on the grandchild-link (figure 1, structure 162) and sending transaction to the parent bridge. Each data packet's source connection identifier and designation connection identifier are the claimed transaction identifier for the transaction link; hence, the prior art discloses sending the transaction identifier to the parent-bridge. Thus, the claim is anticipated by the prior art.

Official Action mailed August 17, 2004, pp. 4-7.

Applicants respectfully traverse these rejections. Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

In the rejection of independent claims 12, 21 and 26, the Examiner asserted that the allegedly admitted prior art discloses all of the recited features. However, Applicants respectfully assert that the rejection is deficient for at least two reasons. First, Applicants submit that no prior art has been *admitted* in the present application. Secondly, Applicants assert that the passage cited by the Examiner discloses a problem, *not* the claimed subject matter. Hence, the passage cited by the Examiner is not prior art and cannot anticipate any of claims 12, 21 and 26.

Regarding the first point, Applicants note that the present application does not *admit* any prior art. Pursuant to M.P.E.P. § 2129, the statements of an applicant can only be used as an admission if the applicant specifically admits that something is prior art. Simply *mentioning* something in the paragraphs of the “Description of Related Art” section, which is herein referred to as the “background section,” is *not* an inherent admission. Accordingly, the passages relied upon by the Examiner and alleged to be prior art are, in fact, not an admission of prior art by

Applicants. Therefore, the Examiner has improperly asserted that the passages are prior art and improperly relied upon these passages against independent claims 12, 21 and 26.

Regarding the second point, even assuming the background section is prior art, which Applicants do not admit, it does not disclose all of the features recited in the present application. For example, independent claim 12 recites “a transaction identifier communication link for sending a plurality of transaction identifiers associated with the plurality of transactions sent on the child-link.” Independent claim 21 recites “matching the transaction identifier to a transaction order queue of the plurality of transaction order queues for the child-link” and “routing the transaction to the transaction order queue.” Finally, independent claim 26 recites “originating a transaction identifier” and “sending the transaction identifier to the parent-bridge.” Each of these recited features is associated with a *transaction identifier*. Yet, the *transaction identifier* is not disclosed or even suggested in the background section of the present application. As such, the passages relied upon by the Examiner are devoid of and fail to disclose or suggest all of the recited features of the independent claims.

Accordingly, in view of the remarks set forth above, Applicants respectfully submit that the Examiner has not demonstrated a *prima facie* case of anticipation. Therefore, Applicants respectfully request the Examiner withdraw the rejection and allow the pending claims 12-13 and 15-30.

Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-7, 9-11, 14 and 31-38 under 35 U.S.C. § 103 (a) as being unpatentable over admitted prior art and judicial notice. Specifically, the Examiner stated:

Referring to claim 1: The admitted prior art discloses a child-link (Specification, pages 1-3, figure 1, structure 152) for receiving a plurality of transactions; and a transaction identifier communication link (figure 1, structure 152) for receiving a plurality of transaction identifier (content stored in figure 1, structure 145) for identifying the plurality of transactions; and a plurality of transaction order queues (figure 1, structure 145), and each data packet's source connection identifier and designation connection identifier are the claimed transaction identifier for the transaction link. The prior art does not disclose a plurality of transaction order queues associated with one child-link. Both MPEP and the court have held that duplication of essential working parts of a device involves only routine skill in the art (MPEP 2144 and *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8). Thus, it would have been obvious to one having ordinary skill in the computer art at the time Applicant made the invention to multiply the transaction order queues because both MPEP and the court have held that it only involves routine skill in the art to duplicate essential working parts.

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Referring to claim 31: The prior art discloses a parent-bridge (figure 1, structure 149) including a child link (figure 1, structure 152); and a plurality of transaction order queues (figure 1, structures 142 and 144) connected to the child-link; and a child-bridge (figure 1, structure 139) connected via the child-link to the parent bridge and further comprising a plurality of grandchild-links (figure 1, structures 162 and 164). The prior art does not explicitly disclose a plurality of processors, but prior art at least includes one processors. Both MPEP 2144 and the court have held that duplication of the essential working parts of a device involves only routine skill in the art; thus, it would only involve routine skill in the computer art at the time Applicant made the invention to duplicate the processors because it only involves routine skill in the art to duplicate the essential elements of a device.

Official Action mailed August 17, 2004, pp. 8-9 and 11.

Applicants respectfully traverse the Examiner's rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

In the rejection of independent claims 1 and 31, the Examiner asserted that the Applicants' alleged admitted prior art discloses all of the recited features except that the alleged

prior art does not disclose a plurality of transaction order queues associated with one child-link. In an attempt to cure this deficiency, the Examiner asserted that the duplication of essential working parts of a device involves only routine skill in the art. Applicants respectfully assert that the rejection is deficient for at least three reasons. First, Applicants submit that no prior art has been *admitted* in the present application. Secondly, Applicants assert that the passage cited by the Examiner along with the duplication of essential working parts of a device, which is believed to be improper, fails to disclose the claimed subject matter of independent claim 1. Finally, the Examiner has improperly relied upon hindsight reconstruction to construct the claimed subject matter from the cited material. Hence, the alleged admitted prior art is improperly asserted against the claimed subject matter and cannot render the claimed subject matter obvious.

First, for the same reasons presented above in discussing the rejection under 35 U.S.C. § 102, Applicants note that the present application does not *admit* any prior art. That is, the passages relied upon by the Examiner cannot be used as basis for a rejection under 35 U.S.C. § 103.

Secondly, even assuming the background section is prior art, which Applicants do not admit, it does not disclose all of the features recited in the present application. For example, independent claim 1 recites “a transaction identifier communication link for receiving a plurality of transaction identifiers for identifying the plurality of transactions.” The background section along with the duplication of essential working parts does not disclose or suggest transaction identifiers, as noted above, much less, “a transaction identifier communication link for receiving a plurality of transaction identifiers for identifying the plurality of transactions,” as recited in

claim 1. Accordingly, the passages relied upon by the Examiner, even considered with duplication of essential working parts, which is addressed below as improper, are devoid of and fail to disclose or suggest all of the recited features of the claims and cannot render the claimed subject matter obvious under 35 U.S.C. § 103.

Finally, the Examiner has improperly relied upon hindsight reconstruction to disclose the claimed subject matter. Claim 1 recites “a plurality of transaction order queues associated with the child-link,” while claim 31 recites “a plurality of transaction order queues connected to the child-link.” As admitted by the Examiner, the passages cited by the Examiner only describe a parent-bridge as having a single transaction order queue for each child link. That is, the background section is devoid of any discussion or reference to a plurality of transaction order queues. Accordingly, in an attempt to disclose the claimed subject matter, the Examiner relied upon duplication of essential parts, which the Examiner asserts is based on the holding from *St. Regis Paper Co. v. Bemis Co., Inc.*, 193 U.S.P.Q. 8 (7th Cir. 1977), to disclose the claimed subject matter.

However, the Examiner’s reliance on *St. Regis Paper Co.* is improper because the Examiner is using hindsight in an attempt to cure the deficiencies of the background section, which is not even prior art. Specifically, in *St. Regis Paper Co.*, the court held that placing multiple bags together to form a single multilayer bag is not novel because using multiple bags together was known in the bag industry. See *St. Regis Paper Co.* at 11. That is, each of the bags was taken as a complete unit and combined together for the known purpose of strengthening the entire bag structure. This benefit was *admitted by the patentee* to be known to others prior to the

patent, thus providing the *evidence* required to support the holding. *See id.* In the present rejection, the Examiner is trying to assert that one of ordinary skill in the art would modify a parent-bridge having a single TOQ to include multiple TOQs. However, unlike the cited case, Applicants have not admitted that multiple TOQs as claimed in claims 1 and 31 are known in the prior art to be equivalents of a single TOQ. Thus, the Examiner's proposed combination of duplication of plural TOQs along with the background section (if considered as prior art which Applicants do not admit and assert is improper) would have provided no reason for the combination other than the hindsight gained from the invention itself and cannot suggest the desirability, and thus the obviousness, of making the combination. Accordingly, the duplication asserted by the Examiner is not supported by the background section or the Examiner's unsubstantiated assertions, but is based on the Examiner's improper reliance on hindsight reconstruction and material that is not prior art in an improper attempt to disclose all of the claimed subject matter.

Moreover, the Examiner has taken official notice of facts outside of the record that the Examiner apparently believes are capable of demonstration as being "well-known" in the art. Specifically, the Examiner asserted "a plurality of transaction order queues associated with one child-link" is "well known" in the art. Yet, in the rejection, the Examiner failed to provide adequate support for this assertion. Therefore, in accordance with M.P.E.P. § 2144.03, Applicants seasonably traverse and challenge the Examiner's apparent use of official or judicial notice. Specifically, Applicants respectfully request objective evidence, such as an additional reference, in support of the Examiner's position. If the Examiner finds an additional reference and applies it against the present claims, Applicants further request that it be cited in a non-Final

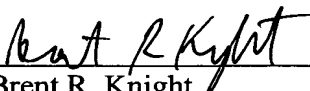
rejection and that the Examiner specifically identify the portion of the newly cited reference that discloses the allegedly "well known" elements of the recited claims, as discussed above, or withdraw the rejection.

Accordingly, in view of the remarks set forth above, Applicants respectfully submit that the Examiner has not demonstrated a *prima facie* case of obviousness. Therefore, Applicants respectfully request the Examiner's withdraw the rejection and allow the pending claims 1-7, 9-11, 14 and 31-38.

Conclusion

In view of the remarks set forth above, Applicants respectfully request reconsideration of the Examiner's rejections and allowance of all pending claims 1-38. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Date: November 17, 2004



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IN THE DRAWINGS

Please replace the originally filed drawings with the drawings attached hereto as Appendix A. Appendix A includes a copy of four figures, which are each labeled as a “Replacement Sheet” and include the Figures 1, 2, 3A and 3B.